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Marital Conflict and Child-Mother Attachment Relationships

For the degree of Master of Science

Is approved by the final examining committee:

German Posada

Chair

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Approved by Major Professor(s): German Posada

Approved by: Doran French 4/21/2015
Head of the Departmental Graduate Program Date

MARITAL CONFLICT AND CHILD-MOTHER ATTACHMENT RELATIONSHIPS

A Thesis

Submitted to the Faculty

of

Purdue University

by

Laura Y Anaya

In Partial Fulfillment of the

Requirements for the Degree

of

Master of Science

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West Lafayette, Indiana

This work is dedicated to my husband and my mother who inspire me every day with their unconditional support, strength, and love.

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ABSTRACT

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The present study explored the relations between marital conflict and child-mother attachment relationships. A nonclinical sample of 86 non-Hispanic Caucasian mother-child dyads participated in the study when children were approximately 3.5 years old ($M = 3.73$). Maternal sensitivity and children's attachment security were observed across three visits: one visit was in the home, and two visits were in the park. Mothers completed a series of questionnaires measuring a global index of marital discord, spousal verbal aggression, spousal physical aggression, and childrearing disagreements. The relations between the aspects of marital conflict on maternal sensitivity and children's attachment security with their mothers were explored. In line with previous research, results revealed that maternal sensitivity was positively associated with children's attachment security, indicating that mothers who were more sensitive and responsive with their children were more likely to have children who used their mothers as a secure base from which to explore from. Results also revealed very low overall reports of conflict in the sample. Despite the low levels of conflict reported, verbal aggression significantly predicted maternal sensitivity above and beyond global marital conflict. Findings are discussed in light of attachment theory and previous marital conflict research, and

suggest the need to replicate this study with a more representative sample, in terms of ethnicity and SES factors in order to potentially find more variability in the measures, as well as to increase the ability to generalize findings. Additionally, the need for a larger sample is highlighted, in order to increase the power to detect effects. Studying these relations longitudinally would also help establish the direction of any effects found. Further, findings also underscore the need to include fathers in future studies in order to have a better understanding of what occurs in the marital relationship and the family system.

CHAPTER 1. INTRODUCTION

In this study, I aimed to investigate the relations between marital conflict and the quality of children's attachment relationships with their mothers. Beyond the association between a global index of marital conflict and child security, I investigated whether verbal and physical marital aggression were associated with children's attachment security, and whether marital disagreements specifically concerning childrearing were related to security. Further, while exploring these relationships, I investigated whether the associations between child security and verbal and physical aggression against the mother, and spousal disagreements about childrearing, if any, were mediated by maternal sensitivity.

Child-mother attachment relationships are hypothesized to play a key role in child development. In the context of these relationships, children explore and learn about the environment and themselves. Furthermore, attachment relationships provide children with a context for socialization and the development of expectations about close relationships in general. Attachment relationships have individual-difference implications in the domains of interpersonal adaptation and personality (Vaughn, Bost, & van IJzendoorn, 2008). In line with these notions, attachment security in infants has been

found to be related to a broad array of developmental outcomes and processes. Research indicates that early attachment security is significantly associated with children's peer interactions and relationships, emotion regulation and understanding, conscience development, self-concept, memory and social-cognitive capabilities (Berlin, Cassidy, & Appleyard, 2008; Thompson, 2008). For example, in three different longitudinal studies, securely attached infants were found to have made more friends in middle childhood than insecurely attached infants (Elicker, Englund, & Sroufe, 1992; Grossmann & Grossmann, 1991; Lewis & Feiring, 1989). Also, infant attachment security has been found to be important for how young children attend to, process, and remember events related to their relational experiences (Belsky, Spritz, & Crnic, 1996). Thus, child-parent relationships are a predictor and contributor to children's social and emotional development.

CHAPTER 2. REVIEW OF THE LITERATURE

2.1 Child-mother attachment relationships

According to Bowlby (1979), an individual's expectation about others' emotional availability influences the development of later relationships in the individual's life.

Bowlby defined an attachment as a specific and enduring affectional bond between child and caregiver (1988). One of attachment theory's central theses is concerned with the perception of an attachment figure from which one can explore from and return to for comfort (Bowlby, 1969/1982, 1973, 1978, 1988). Children learn to trust (to different degrees) their parents to be available for them when they need help, or reassurance.

Bowlby thought that "the infant and young child should experience a warm, intimate, and continuous relationship with his mother (or permanent mother substitute) in which both find satisfaction and enjoyment" (Bowlby, 1951, p. 13). Further, Bowlby proposed that children's experiences with caregivers are organized as mental models that are the essence of attachment security versus insecurity. Individuals build representational or working models of themselves, others, and relationships from these experiences (Bowlby, 1969/1982, 1973, 1980).

Children's attachment security, i.e., trust in a caregiver's availability and response is constructed through child-caregiver interactions in which a caregiver provides adequate secure base support. Mothers who are skillful in facilitating and participating in smooth

interactions with their children, who are available and sensitive to their children's signals and communications, accepting of their child's needs, and cooperative with their child's behavior have children who are confident in their mother's availability and response. In few words, children who are securely attached to their mothers have mothers who provide sensitive care (Ainsworth, Blehar, Waters, & Wall, 1978; De Wolff & van IJzendoorn, 1997; Goldberg, Grusec, & Jenkins, 1999; Thompson, 1997). Indeed, the influence of quality of maternal care (i.e., sensitivity) on children's attachment security is one of the central hypotheses of attachment theory (Bowlby, 1969/1982). Numerous studies have found evidence for the link between maternal sensitivity and child security in infants, toddlers, and preschoolers (Barnett, Kidwell, & Leung, 1998; De Wolff, & van IJzendoorn, 1997; Posada et al., 2007; Stevenson-Hinde & Shouldice, 1995; Teti, Nakagawa, Das, & Wirth, 1991; Vereijken, Riksen-Walraven, & Kondo-Ikemura, 1997). Further, sensitivity has been shown to play a causal role in the organization and maintenance of secure base behavior in children (Bakermans-Kranenburg, van IJzendoorn, & Juffer, 2003).

In the context of child-mother interactions, infants and children organize their attachment behavior. This organization is reflected in children's use of an attachment figure as a secure base (Ainsworth et al., 1978). Different patterns of behavioral organization reflect diversity in children's daily exchanges with their mothers. Ainsworth and colleagues (1978) described three types of attachment classifications they observed in 12 month old infants: secure (B), avoidant (A), and ambivalent (C). The latter two are insecure patterns of attachment. Attachment security is inferred from those different patterns of organization of secure base behavior (Ainsworth et al., 1978).

2.2 Attachment relationships in context

Attachment researchers have suggested that child-parent attachment relationships are influenced by the context in which they take form and develop. Bowlby (1949) was one of the first to point out the need to consider the family in understanding children's distress and security. For many children, the family provides the main context wherein child-mother attachment relationships are constructed and maintained. Empirical evidence shows that children's attachment security is related to the dyad's (i.e., mother and child) living circumstances. Vaughn and colleagues (Vaughn, Egeland, Sroufe, & Waters, 1979) found that families' stressful living conditions were associated with attachment insecurity in babies between 12-18 months. Posada et al. (1999) reported that families from low socio-economic sectors of a Colombian sample had significantly lower maternal sensitivity and child security scores than families from a middle-class sample in the same population. De Wolff and van IJzendoorn (1997) suggested that a move to the contextual level is necessary in order to take into account the complex relationship between the sensitivity-security link and the buildup of stresses and risk factors that impact it.

Attachment researchers working within a family systems perspective suggest that child-mother relationships and children's attachment security cannot be understood outside of the context in which they take place and develop (Marvin & Stewart, 1990). More specifically, researchers have long suggested that different family subsystems within the larger family system impact child-mother relationships (Belsky, 1981; Belsky, 1984; Bowlby, 1949; Cowan, Bradburn, & Cowan, 2005). The marital relationship provides an immediate context wherein child-mother attachment relationships are

constructed. The marital relationship provides an immediate context wherein child-mother attachment relationships are constructed. Research has indeed shown that marital conflict spills over into the parent-child subsystem, negatively affecting parenting, and in turn, it influences children's development (Buehler & Gerard, 2002). Bowlby (1988) argued that if a mother can turn to her spouse as a secure base, then the mother will in turn be able to be more available to serve as a secure base for the child. A mother, feeling supported in times of need by her partner, is more likely to be available and appropriately responsive to her child's signals and communications. Conversely, a caregiver in a conflictive spousal relationship may experience difficulties to provide sensitive care for her child. Numerous studies have provided confirmatory evidence for this notion. Findings indicate that the amount and nature of contact and support that mothers experience from significant others in their lives is related to the way that they interact with their children (for a meta-analysis, see Andresen & Telleen, 1992). For example, mothers can feel more confident meeting the demands that their parental roles present when they have social support from their partners, and this can prevent them from appraising parenthood as stressful. Emotional support helps raise parents' self-esteem, which in turn, also boosts their confidence to carry out their parental role (Andresen & Telleen, 1992).

As child security and maternal sensitivity are concerned, previous research suggests that the marital relationship is associated with both. For example, Isabella (1994) found that mothers who received a high amount of social support from their marital relationships were found to have high maternal role satisfaction, and in turn, exhibited high quality of care; subsequently, their children were more likely to be securely attached.

In a study of 34 Japanese infants and mothers using the Strange Situation procedure, mothers of securely attached infants perceived greater support from the father than did mothers of anxiously attached/avoidant infants (Durrett, Otaki, & Richards, 1984). Durrett et al. (1984) explained that this may be because mothers who do not perceive support from their partner may experience a higher level of stress than mothers who do perceive partner support, and thus be less psychologically available to their infant. Also, Goldberg and Easterbrooks (1984) found good marital quality to be associated with optimal toddler functioning and sensitive parenting attitudes, perceptions, and behaviors.

2.3 Marital conflict and security

Previous empirical studies have suggested that the way parents and children handle and express their emotions in response to interparental conflict may negatively affect parent-child relations (Crockenberg & Langrock, 2001; Davies & Cummings, 1994). Likewise, Cummings and Davies (1994) found that a child's perceptions of the degree to which marital conflict is resolved serves as a salient mechanism linking parents' conflict and their children's adjustment. For example, toddlers exhibit low levels of distress when exposed to constructive, emotionally well-modulated parental conflict. Past studies have found that children are more likely to experience security when their parents' marital conflict is handled in peaceful and loving ways (Cummings, Goeke-Morey, & Papp, 2003; Davies, Cummings, & Winter, 2004; Easterbrooks, Cummings, & Emde, 1994; Goeke-Morey, Cummings, Harold, & Shelton, 2003).

On the other hand, marital conflict has the potential to negatively impact the child-mother relationship and child security. A meta-analysis of 68 studies examining the

linkage between marital and parent-child relationship quality found negative marital interactions and parent-child relationship quality to be associated (Erel & Burman, 1995). The lack of emotional security that children experience due to their parents' conflict has been found to be associated with impaired child outcomes, such as the organization of children's emotional response to stressful situations (Cummings & Davies, 1994). Davies, Winter, and Cicchetti (2006) explained that repeatedly witnessing marital conflict in the home not only influences children's appraisals about the intactness of their family and their psychological adjustment, but it also influences their beliefs about whether their needs will be met in times of marital unrest. Frequent conflict in the spousal relationship is likely to co-occur with more destructive forms of conflict, e.g., conflict where there is verbal (insults) and physical aggression (Davies & Cummings, 1994; Jouriles, Norwood, McDonald, Vincent, & Mahoney, 1996; Laumakis, Margolin, & John, 1998).

Relevant to the current study, it has been found that frequency of marital conflict is negatively associated with both parental availability and sensitivity towards their children (Cummings et al., 2003; Goeke-Morey et al., 2003; Owen & Cox, 1997). Therefore, parental care characteristics (e.g., accessibility, acceptance, cooperation with child's ongoing behavior, and sensitivity) needed for secure attachment relationships to develop, are less likely to be exhibited when there is frequent spousal conflict (Ainsworth et al., 1978; Davies & Cummings, 1994; Erel & Burman, 1995). Several previous studies have indeed reported significant negative associations between global assessments of marital discord and attachment security during infancy (e.g., Cummings, Zahn-Waxler, & Radke-Yarrow, 1981; 1984; Goldberg & Easterbrooks, 1984; Howes & Markman, 1989; Isabella & Belsky, 1985).

2.4 The Current study

Although researchers have previously reported associations between global indices of marital conflict and attachment insecurity, and has hinted at the potential impact that discord may have on quality of maternal care, much is unknown as to the specific aspects and pathways through which marital conflict influences child-mother attachment relationships. In addition to confirming previous findings linking the occurrence of marital discord to attachment (in)security, this study investigated two specific aspects of marital discord hypothesized to be relevant in explaining the association between marital conflict and attachment security, i.e., verbal and physical aggression, and conflict about child rearing. Further, it explored the role that maternal sensitivity plays when accounting for the associations between marital conflict and security.

2.5 Spousal aggression and security

Different behaviors that take place during marital discord, such as verbal and physical aggression, have been negatively linked to children's outcomes. Verbal aggression (e.g., insulting or swearing at the partner) is a type of marital aggression that Jouriles et al. (1996) found to contribute to the occurrence of children's internalizing and externalizing behavior problems, after controlling for physical aggression, in children aged 5 to 12 years in two cross-sectional studies. Further, threats of abandonment are potentially damaging to attachment security as they hit at the center of an attachment figure's availability. Indeed, in their cross-sectional study observing 8-11 year-olds, Laumakis, Margolin, and John (1998) found that conflicts involving threats to leave elicited similar high levels of negative reactions from children as conflicts involving physical aggression. Also of note, conflicts involving physical aggression and threats to

leave were more upsetting than were the conflicts that consisted of name-calling and negative voice qualities. Thus, the potential effect that verbal aggression may have on children's attachment security is of interest. Research on this issue was not found despite its relevance.

Physical aggression is at a negative extreme of a continuum of marital conflict (Cummings, 1998). Findings have indicated that children often see, hear, and intervene in episodes of marital violence (Fantuzzo, Boruch, Beriama, Atkins, & Marcus, 1997), which may have negative consequences for them, even if they are not the target of the violence (Osofsky, 1995). Fantuzzo et al.'s (1997) study examined children exposed to physical marital aggression against their mothers in a sample of children aged 0-18 in five large U.S. cities. Mothers who were victims of physical abuse were interviewed and then contacted again six months later for a follow-up interview to elicit victims' reports of assault during the intervening period. Across the sample, the youngest children (ages zero to five) were significantly more likely to be exposed to physical aggression against their mothers than were the older children in the study. Further, families were more likely to have more occurrences of spousal physical aggression against the mothers when they had children aged zero to five years old, in comparison to the families who had children aged six to eighteen.

Physical aggression during discord has also been found to be more harmful to children than verbal aggression. Children aged 10-12 years reported greater negative affect and perceived threat to hypothetical conflict situations involving physical aggression compared to situations involving verbal conflict in a cross-sectional study (Oh, Lee, & Park, 2011). These findings support previous cross-sectional research that found

that children 4-9 years of age discriminated between verbal and physical aggression in marital conflict, and that children from families with interparental physical conflict were more distressed than children from families in which parents did not report physical conflict (Cummings, Vogel, Cummings, & El-Sheikh, 1989). As child attachment security is concerned, Posada and Pratt (2008) found a significant association between maternal reports about spousal physical aggression and security in a cross-sectional study examining preschool aged children and their mothers. Furthermore, those researchers found that information about spousal aggression against the mother, and exposure of the child to it contributed significant additional information, beyond that contributed by a general index of marital conflict, to the prediction of child security.

Previous research has also found that older children who come from families with marital discord may have more adjustment difficulties than younger children, likely because they have been living with marital conflict in their homes for a longer time. For example, Cummings, Schermerhorn, Davies, Goeke-Morey, and Cummings (2006) found that children over the age of 11, displayed stronger links between marital conflict and emotional security, than did children younger than 11. These findings in regard to children's emotional security and developmental outcomes further support the need for examining the association between marital aggression and preschool-aged children's attachment security, in order to shed light on the ways to intervene and increase younger children's potential for positive future outcomes (e.g., increased attachment security) while they are still young.

In that line of thinking, Manning, Davies, and Cicchetti (2014) found that sensitive parenting buffered the risk posed by interparental violence (IPV) on two-year-

old children's changes in externalizing and prosocial development over a two-year period. Sensitive parenting, as assessed via a mother-child problem solving task, significantly mediated the levels of children's angry reactivity to interparental physical aggression.

2.6 Childrearing disagreements and security

The content of marital discord has been found to be a significant predictor of how children are affected. McDonald, Jouriles, Rosenfield and Leahy (2012) reported that in their sample of children aged 7-10, a very large proportion (79%) of the 134 children inquired to their mothers about their parents' conflict in the home. Further, the children's most common concern about their parents' conflict was why their parents were fighting. In their study with 11-12 year old children, Grych and Fincham (1993) found that children's appraisals of marital conflict were influenced by the content, intensity, and cause of the conflict. For example, when the conflict concerned the child, subjects reported more shame of being drawn into the conflict, and also were more likely to intervene in it. Conflicts about child-related themes were found to be more distressing than conflicts about other issues (Grych & Fincham, 1993). Similarly, another cross-sectional study with Korean children between the ages of 10 to 12 found that child-related conflict led to greater fear of being drawn into the conflict, shame, and self-blame in children (Oh et al., 2011). In this same study, children who reported high level of interparental conflict manifested more externalizing and internalizing behavior problems in addition to more self-reported depressive symptoms. The relations between parental conflict about childrearing and child security is of interest here. Because children's interests are at stake in this type of spousal conflict, it may be particularly salient to

children and could potentially have consequences in their relationship with their mothers. Very little research on the issue, pertaining to preschool-aged children, has been conducted and thus it was explored in this study.

In order to understand the associations between marital discord and attachment security, further research about what specifically occurs during spousal conflict is needed. The relation between these constructs has typically been studied with global assessments of spousal discord, e.g., the Short Marital Adjustment Test (SMAT; Locke & Wallace, 1959). However, such global indices of marital discord fail to provide enough information about the precise aspects of discord that may help explain the association found. A main goal of the current project was to examine the relations between two specific and theoretically relevant characteristics of parental marital conflict: spousal (verbal and physical) aggression against the mother and disagreements about childrearing.

Finally, theory and research reviewed above (e.g., Andresen & Telleen, 1992; Bowlby, 1988; Durrett, Otaki, & Richards, 1984; Goldberg & Easterbrooks, 1984; Isabella, 1994) indicate that maternal sensitive care is likely to be influenced by marital conflict. Yet, the role as a mediator played by maternal sensitivity in the relations between marital conflict and attachment security has not explicitly been tested. It is argued here that if marital conflict is characteristic of spousal exchanges, it would impact child security directly as well as indirectly via maternal quality of care. The latter was hypothesized to be negatively influenced by conflictive spousal interactions.

Thus, in the current study, I addressed the following questions: 1) Is a global index of marital conflict associated with maternal sensitivity and children's attachment security during the preschool years? Based on empirical findings to date it was

hypothesized that the frequency of marital conflict would be negatively associated with maternal sensitivity and children's attachment security.

2) Do verbal and physical spousal aggression against the mother predict maternal sensitivity and child security, above and beyond global marital conflict? As before, I hypothesized that as spousal aggression against the mother increased, maternal sensitivity and children's attachment security would decrease. Further, if physical aggression is present in the sample, I hypothesized that it would be more strongly related to maternal sensitivity and children's attachment security, compared to verbal aggression.

2b) Does frequency of verbal and spousal aggression have indirect effects on children's attachment security through maternal sensitivity? I hypothesized that maternal sensitivity would at least partially mediate the relationship between verbal and physical spousal aggression against the mother and child security.

3) Do childrearing disagreements predict maternal sensitivity and attachment security, above and beyond global marital conflict? It was hypothesized that the occurrence of disagreements about childrearing would be negatively associated with maternal sensitivity and children's attachment security.

3b) Does frequency of childrearing disagreements have an indirect effect on children's attachment security through maternal sensitivity? I hypothesized that maternal sensitivity would at least partially mediate the relationship between disagreements about childrearing and child security.

CHAPTER 3. METHOD

3.1 Participants

Eighty-six ($N = 86$) mother-child dyads were recruited when children were approximately 3.5 years of age ($M = 44.39$ months, $SD = 2.49$), from the Greater Lafayette area through local preschools and community fliers. All mothers reported being the primary caregiver of their children, and ranged in age from 22 to 55 years ($M = 34.00$ years, $SD = 6.03$). Mothers were predominately (89.4%) non-Hispanic Caucasian, worked at least part-time (71.8%), and had an average of 16.66 years of education ($SD = 2.23$). Similarly, target children were also primarily (84.7%) non-Hispanic Caucasian. Most of the families (53.5%) were comprised of two children (range: 1 – 6) and annual household income was approximately \$72,000 ($M = \$71,960$, $SD = \$44,990$). About equal numbers of boys and girls participated in the study (52.3% female).

3.2 Procedure

The current study was approved by Purdue University's Institutional Review Board. Participation in the study included three visits (one in the families' homes and two at the park). At the first visit, mothers consented for their own and their child's participation. The home visits were approximately two hours long, and the two park visits, were approximately one hour in length each. Families were compensated for their time at an amount of \$40 per visit. Demographic information was collected during the first visit.

Both park visits were unstructured; mothers and children were instructed to behave as they normally would at the park. Each visit included an assessment of the organization of children's secure base behavior and maternal secure base support; they were assessed using the Attachment Q-Set (AQS; Waters, 1995) and Maternal Behavior Q-Set for Preschoolers (MBQS; Posada, Moreno, & Richmond, 1998), respectively. The home visit was semi-structured and involved several tasks, such as having the mother and child bake cupcakes together using cupcake mix supplied by the researchers, and choosing and participating in everyday mother-child activities in which they commonly engage. At the end of the first visit, researchers presented and described to participating mothers questionnaires about marital conflict and child rearing disagreements. Mothers were asked to fill them and have them ready for the second visit. Completing the questionnaires took mothers approximately 45-60 minutes. This was a multi-method study, in which each source of information was independent of each other.

3.3 Measures

Child security. The organization of children's secure base behavior was assessed with the Attachment Q-set (AQS; Waters, 1995) for each of the three visits. Waters (1995) constructed the instrument's 90 individual items to provide a comprehensive characterization of a child's secure base behavior with respect to a caregiver. The validity of the AQS has been documented in various reports (e.g., van IJzendoorn, Vereijken, Bakermans-Kranenburg & Riksen-Walraven, 2004; Park & Waters, 1989; Pederson & Moran, 1995, 1996; Posada et al., 1999; Posada, Carbonell, Alzate, & Plata, 2004; Vaughn & Waters, 1990; Waters & Deane, 1985). After each visit, each observer separately used the AQS to describe the behavior of the child. Observers followed q-

methodology (Block, 1978) to divide the items into three groups: “characteristic,” “neither characteristic nor uncharacteristic,” and “uncharacteristic”. Next, the three groups were subdivided into nine piles of ten items each, ranging from 9 “most characteristic” to 1 “most uncharacteristic”. An item score corresponds to the pile number in which it is placed.

Prior to data collection, observers were trained in the use of the AQS. Training consisted of observers attending a minimum of four, three-hour-long training sessions during which they spent the first session learning the q-sort methodology, and producing examples for each of the behavioral referents of the AQS. The subsequent three training sessions included observing and describing child behavior with the AQS after observing video-recordings of child-mother interactions in naturalistic settings. In order to be considered “trained,” observers needed to achieve inter-observer reliability of .70 or greater with an expert coder on at least three training tapes. The observers completed their sorting of participating children in the research lab immediately after the visits were over. The sorting was conducted right after the visits, because conducting other visits before sorting the items would pose the potential to interfere with the observers’ ability to recall what they saw during the visits. Two observers described children’s attachment behavior for 44.14% of the visits, with all other visits having only one child observer. Mean interobserver reliability was 0.78 for Time 1 (range: .60 - .90). AQS descriptions were averaged and the resulting composite was scored on security by correlating the composite with a theoretical description of an optimally securely attached child, on a range of -1 to 1, with 1 being the most optimal secure attachment score (Waters, 1995). The resulting correlation index is a child’s security score.

Global marital conflict. The *Family Behavior Survey – Part 1* (Posada & Waters, 1990), an adaptation of both the Short Marital Adjustment Test (Locke & Wallace, 1959) and the Dyadic Adjustment Scale (Spanier, 1976) was used to obtain self-reports about marital conflict from mothers. The scale consists of 15 items ($\alpha = .86$). The response format was a six-point (0–5) Likert scale anchored in terms of frequency of disagreements during the past 6 months: “never” (scored 0), “1–3 times” (scored 1), “4–6 times” (scored 2), “7–9 times” (scored 3), “almost every week” (scored 4), and “every week or more” (scored 5). Mothers self-reported on disagreements with their husbands about topics such as household tasks and maintenance, warmth and affect in their relationship, major financial decisions, time for self versus time with family, and fair sharing of workload between partners. Adequate validity and reliability have been reported elsewhere (Crowell et al., 2002; Posada & Pratt, 2008).

Spousal aggression against mother. The *Family Behavior Survey – Part 2* (Posada & Waters, 1990) was used to measure the frequency of occurrence of spousal aggression against the mother. This measure is composed of 67 items that consist of both verbal and physical aggressive incidents during spousal conflict during the past six months. Mothers self-reported on the items using a 6-point (0–5) Likert scale. The terms of frequency of disagreements during the past six months are: “never” (scored 0), “1–3 times” (scored 1), “4–6 times” (scored 2), “7–9 times” (scored 3), “almost every week” (scored 4), and “every week or more” (scored 5). The items in the FBS-2 specify the behavioral context in which the spousal aggression occurs (e.g., pushing the spouse down during a disagreement). This instrument was created using the Conflict Tactics Scale (Strauss, 1979) and interviews with parents of 3–6 year-old children as points of reference.

(Posada & Waters, 1990). Support for the validity of the Family behavior survey has been reported by Crowell et al. (2002) and Posada and Pratt (2008), who found the measure's items to adequately assess aggressive behaviors in specific behavioral contexts, compared to traditional measures of spousal aggression that measure aggressive behaviors across contexts (e.g., Conflicts Tactics Scale; (Straus, 1979)). The questionnaire contains 15 items that specifically target spousal physical aggression ($\alpha = .78$), and 42 items that target verbal aggression ($\alpha = .91$). Averages were calculated for each of the domains for each participant by averaging their reports on the items. The average verbal aggression report was .12 ($SD = .18$) and the average physical aggression report was .01 ($SD = .04$).

Spousal conflict about childrearing. The *Family Behavior Survey part 3* (Posada & Waters, 1990) was used by mothers to rate the frequency of occurrence of a broad range of child-rearing issues about which parents have disagreed during the last 6 months. The scale consists of 30 items that use a 6-point Likert scale (same scale as the previous two measures). One score was derived for child-rearing conflict, by averaging the ratings on the 30 items. The internal consistency for this scale was $\alpha = .88$. The average report was .45 ($SD = .37$).

Maternal sensitivity. Maternal sensitivity was assessed for each visit using the Maternal Behavior for Preschoolers Q-Set (MBPQS; Posada et al., 1998). The MBPQS has been found to be a valid and reliable measure of maternal sensitivity as observed in natural environments (Posada et al., 2007; Posada & Waters, 2014; Posada et al., under review). The measure consists of 90 behavioral descriptions designed to assess maternal sensitivity (i.e., quality of care). This 90-item q-set is used in the same fashion as the AQS (9 piles with 10 items in each pile). Observers' training followed the same

procedures described above for the AQS. Immediately following the conclusion of each visit, two trained observers independently sorted the MBPQS items for 31% of the visits, with the remaining visits only one observer of maternal sensitivity. The average interobserver reliability was 0.85 (range: .61 - .96). MBPQS descriptions for a mother were averaged and the resulting composite was scored on sensitivity by correlating such composite with the theoretical description of an optimally sensitive mother (Posada et al., 2007). The resulting correlation index is a mother's sensitivity score.

3.4 Analytic Strategy

Research question 1: Is a global index of marital conflict associated with maternal sensitivity and children's attachment security during the preschool years?

To address question one, partial correlation analyses were conducted to explore the direction and strength of the associations, if any, among global marital conflict, maternal sensitivity, and children's attachment security. Partial correlations were used in order to control for the associations between socio-demographic variables (e.g., child gender) and the variables of interest.

Research question 2. To assess the extent to which verbal and physical aggression against the mother predict maternal sensitivity and children's security, four hierarchical regression analyses were conducted. The first two models predicted maternal sensitivity. In the first model, global marital conflict was controlled for in the first step. Lastly, verbal aggression against the mother was included as the last step of the model. The change in R^2 at the last step was assessed in order to determine whether verbal aggression contributed a significant amount of variance in predicting maternal sensitivity, above and beyond global marital conflict. In the second model, global marital conflict

was once again entered in the first step in order to control for it. Then, physical aggression against the mother was included as the last step of the model. The change in R^2 at the last step was assessed in order to determine whether physical aggression contributed a significant amount of variance in predicting maternal sensitivity, above and beyond global marital conflict.

The next two hierarchical regression models were run to assess whether verbal and physical aggression against the mother predicted children's attachment security. In the first model, identified covariates (e.g., gender) were entered in the first step, in order to control for them. Global marital conflict was entered in the second step, with the verbal aggression variables entered in the third and last step. The change in R^2 at the final step was interpreted to determine whether verbal aggression against the mother contributed a significant amount of variance in the prediction of children's attachment security, above and beyond global marital conflict.

Finally, a model was run to examine whether physical aggression against the mother significantly predicted children's attachment security, above and beyond global marital conflict. In the first step of the model, global marital conflict was entered. Then, the physical aggression variable entered in the second and last step. The change in R^2 at the final step was interpreted to determine whether physical aggression against the mother contributed a significant amount of variance in the prediction of children's attachment security, above and beyond global marital conflict.

Research question 2b. The second part of question two examined whether verbal and physical aggression (separately) had indirect effects on children's attachment security, through maternal sensitivity. Although the causal step approach outlined by Baron and

Kenny (1986) has been widely used to test mediation, several limitations have been suggested for this method by recent studies. Concerns with using this method include low statistical power and its requirement for all paths to be significant in order to conclude that mediation is present (Hayes, 2009; MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002; Preacher & Hayes, 2004). Thus, conditional process analyses, using the bootstrapping procedure, were used (Hayes, 2009; 2013). Bootstrapping is a nonparametric approach to hypothesis testing and effect-size estimation that does not make any assumption about the sampling distribution of the statistic or of the shape of the distribution of the variables (Preacher & Hayes, 2004). Further, it can be applied to small sample sizes with more confidence. As outlined by Preacher and Hayes (2004), the bootstrapping was completed by taking a large number of samples of size n (where n is the original sample size) from the data, sampling with replacement, and computing the indirect effect in each sample. This resulted in a sampling distribution of the test statistic (in this case, the indirect effect), which was then used to calculate the confidence interval (CI) for hypothesis testing. If the confidence interval for the indirect effect did not include zero, then I could be 95% confident that my estimate for the indirect effect was not due to chance, and that it was statistically significant.

Research question 3. To explore the extent to which childrearing disagreements predicted maternal sensitivity and children's attachment security, two hierarchical regression analyses were conducted. The first model predicted maternal sensitivity. The first step controlled for global marital conflict, and childrearing disagreements was entered as the second step in the model. The change in R^2 at the last step in the model was then evaluated to determine whether childrearing disagreements accounted for a

significant amount of variance in explaining maternal sensitivity, above and beyond global marital conflict.

The next model predicted children's attachment security. In the first step of the model, identified covariates (e.g., gender) were entered in order to control for them. Global marital conflict was then entered in the second step of the model, with childrearing disagreements entered in the third and final step. The change in the R^2 after the inclusion of the last step was analyzed to conclude whether childrearing disagreements contributed a significant amount of variance in the prediction of children's attachment security, above and beyond global marital conflict.

Research question 3b. The second part of question three examined whether there was an indirect effect of childrearing disagreements on children's attachment security, through maternal sensitivity. The bootstrapping procedure outlined by Preacher and Hayes (2004) used in question 2b was used to test this hypothesis. Once again, if the resulting confidence interval for the indirect effect did not include zero, I could conclude that the indirect path was significant.

CHAPTER 4. RESULTS

4.1 Preliminary analyses

Normality and outliers of key variables. To prepare for the main analyses, descriptive statistics (means, standard deviations, and range scores) were obtained for all variables of interest. The skewness and kurtosis of each variable of interest was examined in order to determine if any had non-normal distributions. Three variables' skewness was of concern: maternal sensitivity was highly negatively skewed (-2.87), and verbal (3.20) and physical (3.90) aggression were both highly positively skewed. In an attempt to correct the skewness, a series of transformations were performed. First, a base-10 log transformation was computed on the maternal sensitivity variable, by first reflecting the scores by subtracting each individual's sensitivity score from one plus the highest score (.85) and then taking the base-10 log of this value. After computing the base-10 log transformation, it was found that the sensitivity variable's skew was slightly improved (2.21), but was still sufficiently skewed, this time positively. Next, an inverse transformation and a square root transformation were performed on the variable to try to normalize the distribution, but these did not alleviate the skewness of the variable. Similarly, base-10 log, square root, and inverse transformations were performed on the physical aggression and verbal aggression variables, and the transformations did not seem

to improve the skewness of the variables. Thus, data presented in the analyses use raw sensitivity, verbal aggression, and physical aggression scores, for ease of interpretation.¹

Univariate outliers for each of the key variables were identified, and those three standard deviations above or below the mean were removed. One maternal sensitivity scores and three child security scores were more than three standard deviations beyond the mean of the respective variables. Further, one global marital conflict score, three physical aggression scores, two verbal aggression scores, and one childrearing disagreement scores were identified as outliers. All outlying values for these six key variables were removed from analyses.

Descriptive statistics and covariates. Descriptive statistics for the key variables can be found in Table 1, and the correlations between the key variables can be found in Table 2. Mothers had relatively high levels of maternal sensitivity towards their children, as assessed by the MBPQS ($M = .71$, $SD = 10$, range: .31 – .85). Children's attachment security with their mothers as assessed by the AQS ($M = .46$, $SD = .15$, range: -.03 - .77) indicated that children tended to use their mother as a secure base from which to explore from. This mean is comparable to security score averages reported in other studies utilizing middle-class samples (e.g., Posada & Pratt, 2008; Posada, Waters, Crowell, & Lay, 1995).

The average occurrence of global marital conflict as reported on the *Family Behavior Survey's* six-point (0–5) Likert scale was low, with a mean of .69 ($SD = .53$,

¹ Due to my small sample size, in addition to attempting to transform the skewed variables, I windsorized them to examine whether keeping more cases in would result in different results. However, this did not change the results. Lastly, I checked whether dummy coding each of the aggression variables (0 = no reports of aggression, 1 = reports of any level of aggression), and found that the significance of the results did not change. Thus, raw scores were used.

range: .00 – 1.93), indicating that mothers reported global marital conflict having occurred, on average, less than “1-3 times” in the past six months at the time of the first visit. Spousal verbal aggression against the mother was reported at an average of .12 on the six-point (0-5) Likert scale ($SD = .18$, range: .00 – 1.83), meaning that the mothers experienced verbal aggression at an average of less than “1-3 times” in the past six months. Reports of physical aggression were even lower ($M = .01$, $SD = .04$, range: .00 – .20) with mothers reporting it at an average of “0 times” in the past six months. Lastly, the occurrence of disagreements regarding childrearing was reported at an average of .45 ($SD = .37$, range: .00 – 1.60), on the six-point (0-5) Likert scale, indicating that these types of childrearing disagreements occurred less than “1-3 times” in the past six months.

Potential control variables (i.e., child gender, household income, maternal age, maternal education, total number of children) were examined as covariates of each of the variables of interest (i.e., attachment security and maternal sensitivity). Child gender was found to be the only covariate of children’s attachment security, $r(83) = -.39$, $p = .00$, with girls demonstrating higher security scores than boys. Therefore, child gender was controlled for in main analyses with children’s attachment security as the outcome. No covariates were found with the maternal sensitivity variable.

Table 1.

Descriptive Statistics for Key Variables (N = 86)

	<i>N</i>	<i>M (SD)</i>	Range	Skewness	Kurtosis
Security	83	.46 (.15)	-.03 – .77	-.41	2.28
Sensitivity	85	.71 (.10)	.31 – .85	-1.75	3.67
Global Marital Conflict	80	.69 (.53)	.00 – 1.93	.60	-.80
Verbal Aggression	81	.12 (.18)	.00 – 1.83	2.67	7.60
Physical Aggression	79	.01 (.04)	.00 – .20	3.11	10.01
Childrearing Disagreements	81	.45 (.37)	.00 – 1.60	1.19	1.29

* $p < .05$, ** $p < .01$, *** $p < .001$.

Table 2

Correlational Matrix of Key Variables (N = 86)

	1	2	3	4	5	6	7	8	9	10	11
1. Security	—										
2. Sensitivity	.33**	—									
3. Global Marital Conflict	-.08	-.13	—								
4. Verbal Aggression	-.09	-.29*	.46**	—							
5. Physical Aggression	.12	.00	-.05	.13	—						
6. Childrearing Disagreements	-.18	-.08	.53**	.50**	.00	—					
7. Child Gender	.39**	-.14	-.13	.40	.78	.29	—				
8. Maternal Education	-.09	-.04	.05	.04	.24*	.04	.12	—			
9. Maternal Occupation	-.05	.08	-.03	.02	.03	-.00	-.13	-.26*	—		
10. Total Income	.12	.08	-.20	.09	.11	-.22	-.12	.41*	-.21	—	
11. Maternal Age	-.02	-.14	-.02	.01	-.05	.02	-.08	.15	-.06	.26*	—

Note. Two-tailed. * $p < .05$. ** $p < .01$. *** $p < .001$.

4.2 Main analyses

Research question 1: Is a global index of marital conflict associated with maternal sensitivity and children's attachment security during the preschool years?

First, a partial correlation for general marital conflict and children's attachment security, controlling for children's gender was run. Results indicated that the global index of marital conflict was not associated with children's attachment security ($r = .03$, $p = .79$, n.s.). Next, a bivariate correlation was run to determine whether general marital conflict was associated with maternal sensitivity, due to there not being any identified covariates for sensitivity. Results indicated that this correlation was not significant ($r = -.13$, $p = .26$, n.s.).

Research question 2. Do verbal and physical spousal aggression against the mother predict maternal sensitivity and child security, above and beyond global marital conflict? The first two models tested whether verbal aggression against the mother significantly predicted maternal sensitivity, above and beyond global marital conflict. Results revealed that verbal aggression did significantly predict maternal sensitivity. Specifically, a one point increase in verbal aggression resulted in a .1 decrease in maternal sensitivity (see Table 3). The R^2 change of .07 at the second step of the model indicated that verbal aggression uniquely accounted for 7% of the variance in predicting maternal sensitivity.

In the second model, global marital conflict was entered in the first step. Second, physical aggression against the mother was included as the last step of the model. Examination of the change in R^2 after the last step of the model indicated that spousal

physical aggression against the mother did not significantly predict maternal sensitivity above and beyond global marital conflict (see Table 4).

The next two hierarchical regression models were run to examine whether verbal and physical aggression against the mother predicted children's attachment security. In the first model, children's gender was entered in the first step. Global marital conflict was entered in the second step, with the verbal aggression variable entered in the third step. The change in R^2 at the final step indicated that verbal aggression against the mother did not contribute a significant amount of variance in the prediction of children's attachment security, above and beyond global marital conflict (see Table 5).

The next model examined whether physical aggression against the mother significantly predicted children's attachment security, above and beyond global marital conflict. The change in R^2 at the final step was not significant, indicating that physical aggression against the mother did not contribute a significant amount of variance in the prediction of children's attachment security, above and beyond global marital conflict (see Table 6).

Table 3

Summary of Hierarchical Regression Analysis Predicting Maternal Sensitivity as a function of Verbal Aggression (N = 80)

Variable	Model 1			Model 2		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Intercept	.73	.02		.73	.02	
General conflict	-.02	.02	-.13	-.02	.02	-.14
Verbal aggression				-.10	.04	-.29**
R^2		.02			.08	
<i>F</i> for change in R^2					5.52*	

* $p < .05$, ** $p < .01$, *** $p < .001$.

Table 4

Summary of Hierarchical Regression Analysis Predicting Maternal Sensitivity as a function of Physical Aggression (N = 79)

Variable	Model 1			Model 2		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Intercept	.73	.02		.73	.02	
General conflict	-.01	.02	-.07	-.01	.02	-.08
Physical aggression				.00	.00	.08
R^2		.01			.01	
F for change in R^2					.51	

* $p < .05$, ** $p < .01$, *** $p < .001$.

Table 5
Summary of Hierarchical Regression Analysis Predicting Children's Attachment Security as a function of Verbal Aggression (N = 78)

Variable	Model 1			Model 2			Model 3		
	B	SE B	β	B	SE B	β	B	SE B	β
Intercept	.53	.02		.52	.02		.52	.03	
Gender	-.12	.03	-.40***	-.12	.03	-.40***	-.12	.03	-.40***
General Conflict				.01	.03	.03	.01	.03	.03
Verbal Aggression							.07	.07	.11
R ²		.16			.16			.17	
F for change in R ²					.07			.79	

* $p < .05$, ** $p < .01$, *** $p < .001$.

Table 6
Summary of Hierarchical Regression Analysis Predicting Children's Attachment Security as a function of Physical Aggression (N = 76)

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Intercept	.53	.02		.52	.03		.52	.03	
Gender	-.12	.03	-.39***	-.12	.03	-.40**	-.12	.03	-.41**
General Conflict				.01	.03	.03	.01	.03	.03
Physical Aggression							.55	.44	.14
<i>R</i> ²		.16			.16			.17	
F for change in <i>R</i> ²					.07			1.58	

p* < .05, *p* < .01. ****p* < .001.

Research question 2b. Does maternal sensitivity mediate the associations, if any, between spousal aggression against the mother and child security? To examine whether there was an indirect effect of spousal aggression against the mother on children's attachment security through maternal sensitivity, conditional process analysis (i.e., mediation analysis) was used (Hayes, 2009; 2013). One model was run for verbal aggression, and a second model was run for physical aggression; children's gender and global marital conflict were controlled for in each model. The results indicated that there was not a significant indirect effect of verbal aggression on children's attachment security through maternal sensitivity (see Figure 1). However, there were direct effects of verbal aggression on maternal sensitivity, and maternal sensitivity on attachment security. Additionally, there was a marginally significant ($p = .05$) direct effect of verbal aggression on attachment security. As Figure 2 shows, there was not a significant indirect effect of physical aggression on children's attachment security through maternal sensitivity.

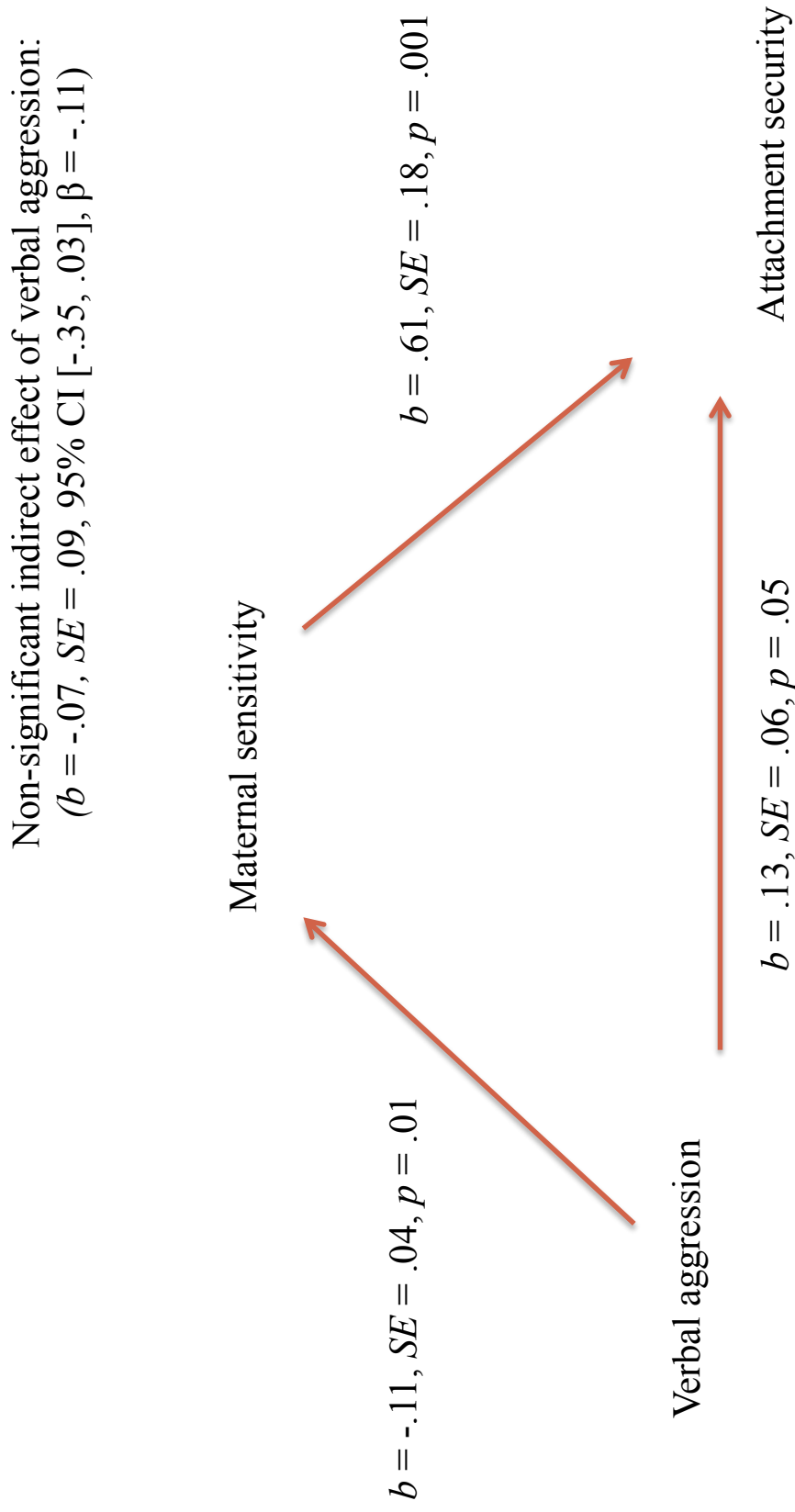


Figure 1. Indirect effect of verbal aggression to attachment security, through maternal sensitivity. Model controlled for child gender and global marital conflict.

Non-significant indirect effect of physical aggression:
 ($b = .01$, $SE = .06$, 95% CI $[-.08, .16]$, $\beta = .02$)

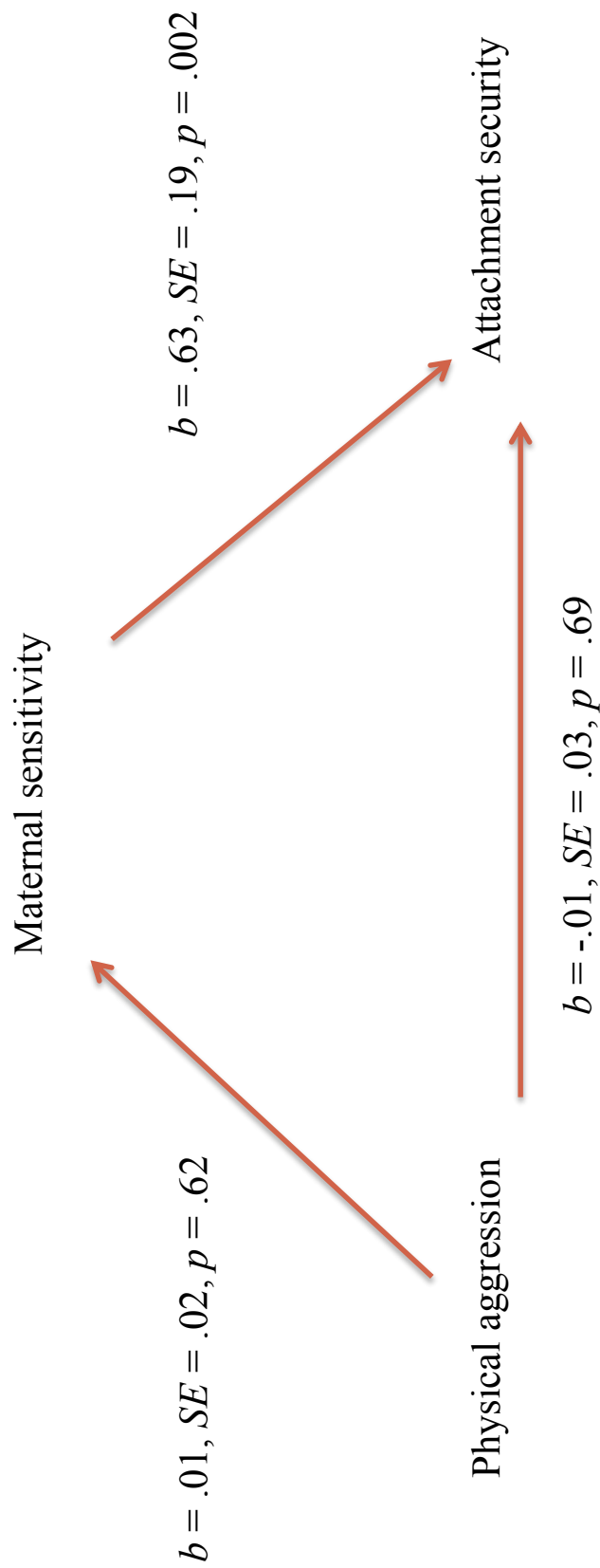


Figure 2. Indirect effect of physical aggression to attachment security, through maternal sensitivity. Model controlled for child gender and global marital conflict.

Research question 3. Do childrearing disagreements predict maternal sensitivity and attachment security, above and beyond global marital conflict? To explore the extent to which childrearing disagreements predicted maternal sensitivity and children's attachment security, two hierarchical regression analyses were conducted. The first model predicted maternal sensitivity. Global marital conflict was controlled for in the first step of the model. Then, childrearing disagreements were entered as the second step in the model. The change in R^2 at the last step in the model was not significant, indicating that childrearing disagreements did not account for a significant amount of variance in explaining maternal sensitivity, above and beyond global marital conflict (see Table 7). The next model predicted children's attachment security. Child gender was entered in the first step. Global marital conflict was entered in the second step of the model. Lastly, childrearing disagreements and was entered in the third and final step. The change in the R^2 after the inclusion of the last step indicated that childrearing disagreements did not contribute a significant amount of variance in the prediction of children's attachment security, above and beyond global marital conflict (see Table 8).

Research question 3b. Does maternal sensitivity mediate the associations, if any, between spousal disagreements about childrearing and child security? To examine whether there was indirect effect of childrearing disagreements on children's attachment security through maternal sensitivity, process modeling (i.e., mediation analysis) was used (Hayes, 2009; 2013). The results indicated that, controlling for children's gender and global marital conflict, there was not a significant indirect effect of childrearing disagreements on children's attachment security through maternal sensitivity (see Figure 3).

Table 7

Summary of Hierarchical Regression Analysis Predicting Maternal Sensitivity as a function of Childrearing Disagreements (N = 79)

Variable	Model 1			Model 2		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Intercept	.74	.02		.74	.02	
General Conflict	-.02	.02	-.14	-.02	.02	-.13
Childrearing disagreements				-.01	.03	-.03
R^2		.02			.02	
F for change in R^2		1.61			.03	

* $p < .05$, ** $p < .01$, *** $p < .001$.

Table 8
*Summary of Hierarchical Regression Analysis Predicting Children's Attachment Security as a function of
 Childrearing Disagreements (N = 77)*

Variable	Model 1			Model 2			Model 3		
	B	SE B	β	B	SE B	β	B	SE B	β
Intercept	.53	.02		.53	.03		.54	.03	
Gender	-.12	.03	-.38**	-.12	.03	-.38**	-.11	.03	-.38**
General Conflict				-.00	.03	-.00	.02	.04	.08
Childrearing disagreements							-.06	.05	-.15
R^2		.15			.15			.16	
F for change in R^2		12.63			.00			1.36	

* $p < .05$, ** $p < .01$, *** $p < .001$.

Non-significant indirect effect of childrearing disagreements:
($b = -.01$, $SE = .04$, 95% CI $[-.12, .05]$, $\beta = -.02$)

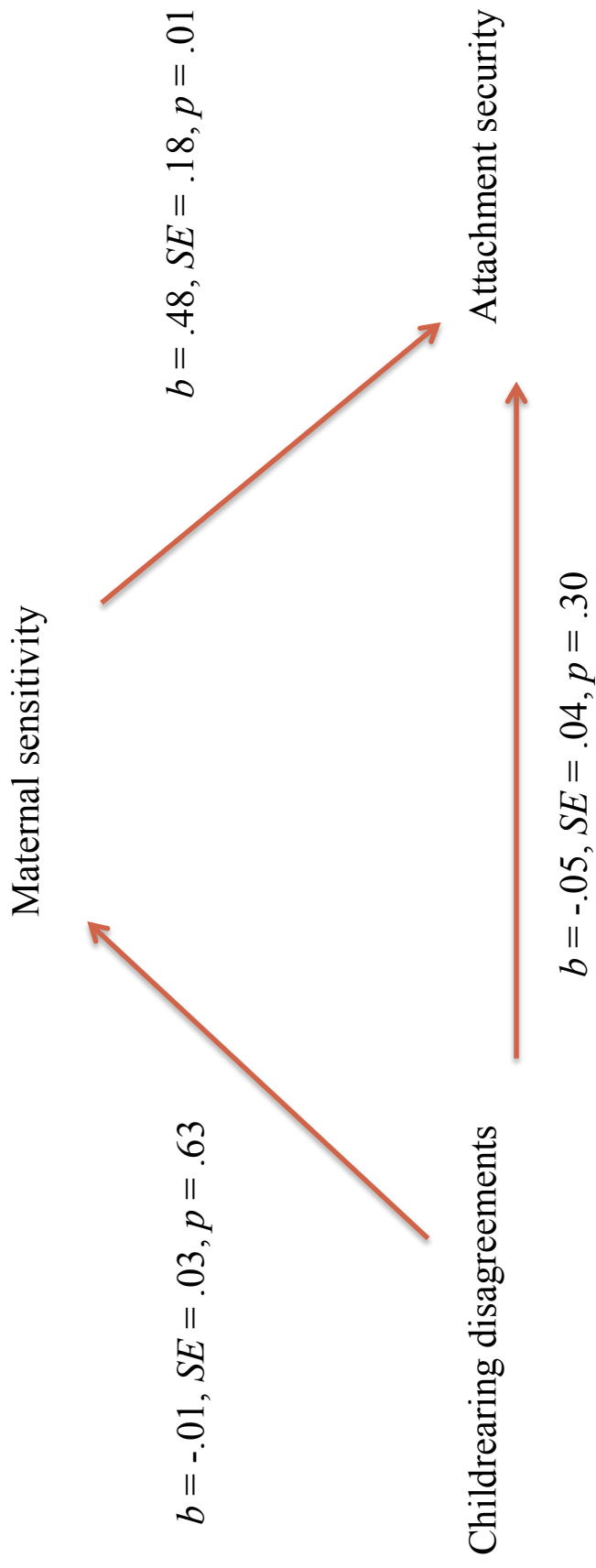


Figure 3. Indirect effect of childrearing disagreements to attachment security, through maternal sensitivity. Model controlled for child gender and global marital conflict.

CHAPTER 5. DISCUSSION

In the current study I investigated how specific aspects of marital discord (i.e., verbal aggression, physical aggression, and childrearing disagreements) possibly explained the association between marital conflict and the attachment security of 3.5 year old children with their mothers. Further, I explored the role that maternal sensitivity plays when accounting for the associations between marital conflict and security.

My preliminary analyses revealed that, on average, the mothers in this sample exhibited relatively high levels of sensitivity towards their children, as assessed by the MBPQS. This indicates that mothers tended to provide a secure base from which their children could explore from and return to during their interactions. The mean scores of maternal sensitivity are comparable to the findings of a different study with a nonclinical sample of middle-class, White mothers and their preschool children (i.e., $M = .71$, $SD = .12$, range: .33 - .86, Lu, 2009). The mean children's security score in the current study ($M = .46$, $SD = .15$, range: -.03 - .77) is also comparable to that of previous studies with similar demographics (i.e., $M = .52$, $SD = .18$, Lu, 2009; $M = .47$, $SD = .20$, Posada, 2007).

In line with previous research, maternal sensitivity and children's attachment security were found to be significantly related ($r = .33$, $p < .01$). This supports the notion that maternal quality of care plays an important role in children's attachment with their

mothers during the preschool years. In other words, mothers who were available and appropriately responsive to their children's signals and bids for attention were more likely to have children who used them as a secure base.

Overall, very low levels of general marital conflict, spousal verbal aggression, spousal physical aggression, and childrearing disagreements were reported. These low rates found in this nonclinical sample were similar to what was previously found in a nonclinical, middle-class, White sample of mothers and their preschool-aged children (Posada & Pratt, 2008). Given that global marital conflict was reported by mothers as occurring less than "1-3 times" in the past six months, it was not surprising to find that a global marital conflict was not associated with maternal sensitivity or children's attachment security. Results, however, did not align with findings reported in previous studies (e.g., Cummings & Davies, 1994; Erel & Burman, 1995).

The results confirmed my hypothesis that verbal spousal aggression against the mother would significantly predict maternal sensitivity, above and beyond global marital conflict. This finding suggests that even when it is found at low levels, the occurrence of verbal aggression in the marital relationship results in a decrease in the mother's ability to provide secure base support for her child. On the other hand, my prediction that spousal physical aggression against the mother would predict maternal sensitivity, after controlling for global marital conflict, was not supported by my findings. This could be due to the fact that spousal physical aggression ($M = .01$, $SD = .04$, *range*: .00 - .20) was reported at even lower levels than verbal aggression in the sample. Similarly, childrearing disagreements did not significantly predict maternal sensitivity, after controlling for general marital conflict. These differential findings regarding the different conflict

dimensions' ability to predict maternal sensitivity supports the notion that it is beneficial to measure specific aspects of conflict separately. For example, Jouriles et al.'s (1996) finding that verbal aggression uniquely predicted children's internalizing and externalizing behaviors led them to highlight the importance of taking into account a full repertoire of aggressive spousal behaviors, to avoid overlooking acts of spousal aggression not involving physical aggression. Thus, measuring specific aspects of marital conflict in the current study allowed me to determine the amount of unique variance, if any, verbal aggression contributed to the prediction of maternal sensitivity.

My final three hierarchical regression analyses tested whether children's attachment security was predicted by verbal aggression, physical aggression, or childrearing disagreements. I found that after controlling for the identified covariate of child gender and global marital conflict in each of the three models, attachment security was not significantly predicted by any of the three variables. I speculate that this lack of significance is attributable to the very low reports of the occurrence of verbal aggression, physical aggression, and childrearing disagreements that may be sample-specific.

In my indirect effect analyses, I found that neither verbal aggression nor physical aggression had an indirect effect on children's attachment security through maternal sensitivity.

Likewise, childrearing disagreements did not have an indirect effect on children's attachment security through maternal sensitivity. These three conflict variables were also not significantly correlated with children's attachment security in the preliminary analyses, indicating that the low levels of the conflict variables found in my largely homogenous sample were not associated with the children's use of their mother as a

secure base, directly nor indirectly. In contrast, Manning et al.'s (2014) study using a more racially diverse population experiencing widely varying levels of interparental violence demonstrates the usefulness of a more inclusive sample to help understand the influence of aggression in family relationships. In addition, children's age is also a factor to consider when comparing my findings with those of previous studies. Cummings et al.'s (2003) findings that children's emotional insecurity about marital conflict reflected in negative emotional responding was found in a sample of children aged 8 to 16 years old. Also of note, partial correlations conducted on the current study's sample when the children were aged 5 years of age ($M = 64.44$ months, $SD = 3.28$) revealed that after controlling for child gender, mothers who reported greater verbal aggression had children with significantly lower security scores (Anaya, Addie, Trumbell, & Posada, 2015). Further, the occurrence of physical aggression and childrearing disagreements were also each significantly negatively related to children's attachment security with their mothers. The findings in my current study highlight the important possibility that children at 3.5 years of age may not be as aware of the conflict occurring in their parent's relationship. This supports Cummings and colleagues' (1989) finding that conflict resolution was particularly salient to 6-9-year-olds in their study, compared to the 4-5-year-olds. Another possibility is that the parents may be more careful about arguing in front of their younger children. This highlights the importance of observing potential changes in the marital relationship as children age, and considering how the child-mother relationship may change as a result.

5.1 Limitations

Several limitations of the current study must be noted. First, the sample was not representative of the population, as it mainly consisted of middle-class, well-educated, low-marital conflict, Non-Hispanic Caucasian mothers, and their preschool-aged children. This limits the generalizability of the findings to only mother-child dyads with similar demographic backgrounds. Thus, a more diverse sample, in terms of ethnicity, income, and education, would potentially result in more variability in the reports of the conflict and aggression constructs. As a result, a more diverse sample would also increase the study's external validity, by being able to generalize the findings to other groups not represented in the current sample.

A second limitation of the current study is that the sample size was relatively small, with 86 mother-child dyads. This small sample size limited the power of the study, as well as its external validity and generalizability to the general population. A third limitation of the study was that maternal sensitivity and children's attachment security were assessed during the same visits. Although independent observers reported on the two constructs separately, the fact that they were measured during the same three visits could have resulted in shared variance, or an inflated association between the two constructs. While measuring maternal sensitivity and children's attachment security during separate visits might be ideal, the multiple-visit design of this study, as well as the use of composite scores for the constructs, may lessen the concern of shared variance between the constructs. Also in relation to the study's design, all of the current study's constructs were assessed concurrently, limiting my abilities to make inferences about my

findings. Future studies should use a longitudinal design in order to help establish the direction of the effects present.

Yet another limitation of the study is that all four of the conflict measures (i.e., global marital conflict, verbal aggression, verbal spousal aggression, and childrearing disagreements) were only reported by the mother. Future studies studying these constructs would benefit from collecting reports of the occurrence of conflict from partners (e.g., fathers) as well, in order to get a second perspective of the occurrence of these aspects of conflict in the marital relationship. This would also allow a comparison of the occurrence of conflict reported by both partners. Further, it would be beneficial to include additional marital conflict measures that are more validated, such as the Dyadic Adjustment Scale (Spanier, 1976). Based on previous studies' (e.g., Cummings, Goeke-Morey, & Papp, 2003; Davies, Cummings, & Winter, 2004) findings that the way in which marital conflict is resolved is significantly associated to the degree to which children are distressed and experience negative reactions, it would be beneficial to include a conflict resolution measure in future studies. For example, including an observational measure of how parents resolve conflict together in a lab setting may help researchers better understand the relation between marital discord and children's outcomes, potentially by examining conflict resolution as a mediating mechanism. Lastly, there may be other factors influencing the child-mother relationship that were not measured in this study. For example, maternal depression, or other health factors may be individual differences that may be influencing how mothers respond and interact with their children. Thus, measuring additional constructs to learn more about the family

members may help identify potential mechanisms to better understand what is occurring in the family context.

5.2 Implications and future directions

The study's finding that verbal aggression significantly predicted maternal sensitivity, above and beyond global marital conflict, confirms that it is useful to study attachment relationships (i.e., mother-child relationship) within the context in which they form (i.e., spousal relationship). Thus, this finding supports the family systems perspective that different family subsystems within the larger family system impact the child-mother relationship (Belsky, 1981; Belsky, 1984; Bowlby, 1949; Cowan, Bradburn, & Cowan, 2005). Specifically, the verbal aggression that occurred within the marital relationship subsystem was related to mothers' ability to provide secure base support for their children. This falls in line with Bowlby's (1988) argument that if a mother cannot turn to her partner for secure base support, she in turn is less available to serve as a secure base for her child. This may be due to the mother being overwhelmed, or experiencing difficulties that inhibit her ability to respond to her child's signals and bids for attention.

In conclusion, although the majority of this study's hypotheses were not confirmed, it will aid future research by demonstrating which areas in the study's design need to be reconsidered. Although this study did not replicate findings found in previous literature, it would be beneficial to replicate this study with a larger and more representative sample in order to be able to generalize findings, as well as increase the study's statistical power. In addition, including reports of both spouses' perspectives on the occurrence of marital conflict, using more than one type of assessment, would strengthen future research examining these relations.

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